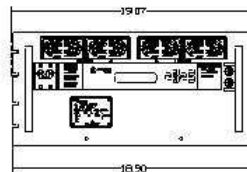
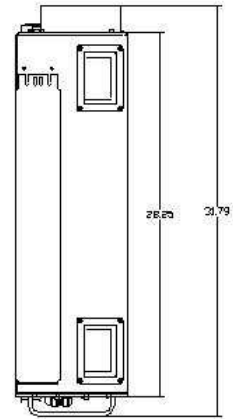
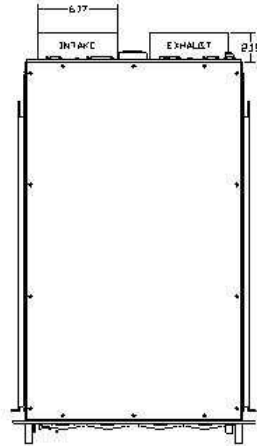
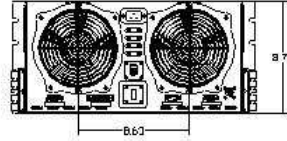




SSPA
SSPB (BUC)

ARMAg-K
ARMUg-K

SG series
SG series



Outline

Features

- Output power of 300W or 400W in a compact single package
- High linearity
- Redundant ready with no external controller
- Full M&C capability via RS232, RS485
- Built-in Forward and Reflected precision power metering
- Output RF calibrated Sample Port
- Redundant Systems shipped fully tested
- Infinite VSWR protection with automatic high reflected power shutdown
- Detachable power supply module
- 19" Rackmount, 5RU, 28" deep
- CE marking

Options

- 1:1 or 1:2 Redundant configuration
- L-Band input (SSPB/BUC operation)
- Internal/External reference with auto-sensing
- Ethernet port

Accessories

- Mounting Slides
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides

Overview

The new Super Compact SG Series Ku-Band SSPA/BUCs provide highest power density in the industry. Combined with the traditional Advantech Wireless features, these new series of BUCs provide the ultimate in performance and convenience.

300W to 400W Ku-Band Rackmount SSPA/ SSPB SapphireBlu™ GaN Technology

General Specifications			
Output Power	300W		400W
P_{SAT} (nominal)	+55.0 dBm		+56.0 dBm
P_{LINEAR}	+51.0 dBm		+52.0 dBm
Operating Frequency	Ku 14.0 – 14.500 GHz	KX	13.75 – 14.5 GHz
L-Band input (BUC)	Ku 950 – 1450 MHz	KX	950 – 1700 MHz
Gain	SSPA 67 dB min	SSPB (BUC)	75 dB min
Gain adjustment range	20 dB in 0.1 dB steps		
Gain flatness over full band	SSPA 2dB p-p max	SSPB (BUC)	4 dB p-p max
Gain slope over 40 MHz	± 0.3 dB max	SSPB (BUC)	± 0.5 dB max
Gain variation over temperature	± 1.5 dB max		
Input Impedance and VSWR	50 Ω	SSPA 1.3:1	SSPB (BUC) 1.4:1
Output VSWR	1.3:1		
Noise power density	-75 dBm/Hz in Transmit Band, -145 dBm/Hz in Receive Band (10.95GHz – 12.75 GHz)		
Spurious at $P_{LINEAR 1}$	SSPA: -65 dBc max	SSPB (BUC):	-55 dBc max
Harmonics	-50 dBc at P_{LINEAR}		
AM/PM conversion	1 ^o /dB at P_{LINEAR}		
Third order intermod. (two tones)	-25 dBc two signal 5 MHz apart at P_{LINEAR} relative to total power		
Spectral Regrowth	-30 dBc at P_{LINEAR} (for QPSK at 1.5 x symbol rate and OQPSK at 1,0 x symbol rate)		
Group delay	Ripple	1 nsec p-p max over any 40 MHz band	
Residual AM Noise	0 – 10 kHz	-45 dBc	
	10 kHz – 500 kHz	-20 (1.25 + log F) dBc F = Frequency in kHz	
	500 kHz – 1 MHz	-80 dBc	
SSPB (BUC)			
Local Oscillator freq.	Ku –13.050 GHz	KX	– 12.800 GHz
Internal Reference frequency (optional)	10 MHz	Aging/day	±2 ⁻¹⁰
		Aging/year	±5 ⁻⁸
		Stability	±2 ⁻⁸ over temp range
Phase Noise	-53 dBc/Hz at 10 kHz	-83 dBc/Hz at 10 KHz	
	-63 dBc/Hz at 100Hz	-93 dBc/Hz at 100 kHz	
	-73 dBc/Hz at 1000Hz		
External Reference Frequency phase noise (max)	10 MHz		
	-120 dBc/Hz at 10Hz	-155 dBc/Hz at 10 kHz	
	-135 dBc/Hz at 100Hz	-160 dBc/Hz at 100 kHz	
	-150 dBc/Hz at 1000Hz		
Weight & Dimensions			
Dimension	19" rackmount 5U high , 28" deep		
Weight	99 lbs (44kg)		
AC input voltage	220V AC ± 20% (47 – 63 Hz) PF 0.95 min		
Power consumption (typical)	1800W at P_{LINEAR}		
	2100W at P_{SAT}		
Interfaces	Input (RF or L-Band)	N type female	AC line IEC 320 Inlet
	Output Sample Port	N type female	RF output WR75
	RS485/RS232/Ethernet	DB9 / RJ45	
Environmental	Temperature	Operating 0°C to +50 °C Storage -55°C to +85 °C	
	Humidity	5% to 95% non condensing	
	Altitude	10,000' AMSL, de-rated by 2 °C/1000' from AMSL	

**NORTH AMERICA
USA**
Tel: +1 703 659 9796
Fax: +1 703 635 2212
info.usa@advantechwireless.com

CANADA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.canada@advantechwireless.com

**EUROPE
UNITED KINGDOM**
Tel: +44 1480 357 600
Fax: +44 1480 357 601
info.uk@advantechwireless.com

RUSSIA & CIS
Tel: +7 495 971 59 18
info.russia@advantechwireless.com

INDIA
Tel: +91 33 2415 5922
info.india@advantechwireless.com

SOUTH AMERICA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.latam@advantechwireless.com

BRAZIL
Tel: +55 11 3054 5701
Fax: +55 11 3054 5701
info.brazil@advantechwireless.com

An ISO 9001 : 2008 Company



Ref.: PB-SSPBg-Ku-Rack-300W-400W-13231